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# The Local Food Grower's Behavior During Planning, Growing, Harvesting, and Selling

#### **Abstract**

This article presents a perspective on the behavior of the local food grower during the market-related decision-making process. The relevant behavior is manifested during the planning, growing, and harvesting and selling phases of the agricultural business cycle. The local food grower faces a set of market alternatives from which, if applying a rational approach, he or she selects one option or a combination of options that allows for profit maximization. Decisions about timing of planting and harvesting are important and are dictated by market conditions and the biological nature of the grower's product. This article contains a number of suggestions for researchers and Extension specialists to consider relative to assisting local food growers.

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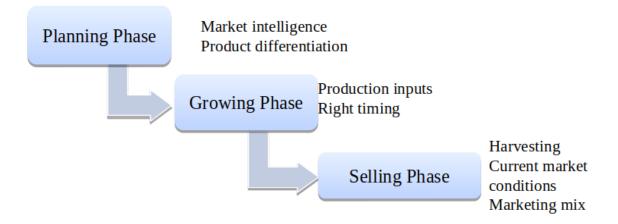
#### Introduction

Existing literature about the local food movement is dominated by studies explaining consumer preferences for and willingness to pay for locally grown food products (Feldman & Hamm, 2014). Thilmany et al. (2013) gave a broad overview of priorities that applied researchers and outreach specialists should undertake to assist growers in marketing and in accessing local and regional supply-chain channels. This article provides a perspective on the behavior of the micro-level grower/farmer within a local food marketing system. Specifically, the article focuses on the behavior of the grower in determining the best market alternative or combination of market alternatives and in undertaking related activities.

### Observing the Local Food Grower's Behavior

The phrase *local food grower's behavior* refers to the observable actions and/or choices the grower makes when faced with a number of alternatives. The behavior can be observed during three major phases of the agricultural business cycle—planning, growing, and harvesting and selling—as illustrated in Figure 1. During each phase, the grower's behavior is manifested through his or her actions and/or choices.

The Local Grower's Behavior Across Three Phases of the Agricultural Business Cycle



### **Grower's Behavior During the Planning Phase**

The local food grower plans ahead for his or her targeted market audience and designs the product accordingly. He or she faces a set of market alternatives to choose from, as illustrated in Figure 2. A rational grower selects a market or a combination of markets that allows for profit maximization. Extension experts should assist the grower in the decision-making process by providing evaluation of the market alternatives to determine which one is optimal for the specific grower. This endeavor requires gathering and analyzing data about anticipated markets for today's decisions to be made accordingly (Crowley, 2004; Rhodes, Dauve, & Parcell, 2015). It also requires good planning relative to expected total revenues and total costs associated with each of the market alternatives. Extension experts also need to promote the market types that are best within local communities (Sharp, Imerman, & Peters, 2002).

Figure 2.

Market Alternatives Available to the Local Food Grower



Note: CSA = community-supported agriculture

Farmers' markets are the most popular direct-marketing outlets available to local food growers and continue to be an important sales outlet nationwide (U.S. Department of Agriculture, Agricultural Marketing Service, 2015). At farmers' markets, there are various arrangements whereby each vendor has a spot. Some spots are located at the marketplace entrances and exits, in the middle of the marketplace, or near high-traffic areas. Given this market arrangement, it would be interesting to investigate vendors' willingness to pay for different spots in the marketplace. The existing literature seems to be silent on this concept.

Another important market alternative is the community-supported agriculture program. Such programs attract consumers whose primary motives are to have a connection to the land and participate directly in food production. Likewise, the grower may find it beneficial to engage in on-farm marketing through farm stands/stores or U-pick or agritourism strategies to allow consumers to pick produce for themselves. Roadside stands, which are seasonal or temporary structures located on or off the farm, and roadside markets, which are usually permanent structures that are often open year-round (Ernst & Woods, 2014), are other market types to consider.

Institutional venues include both private and public eating places, such as restaurants, fast food settings, schools, prisons, military base facilities, and the like. Almost all of these institutions prefer having a contract with a vendor. To be successful in obtaining a market contract, the grower needs professional business-to-business selling skills, which Extension specialists may help the grower gain.

Furthermore, the online marketplace should not be overlooked by the local food grower in that online presence is an important marketing tool for most businesses today. As Pesch (2012) pointed out, web presence offers two big advantages to agricultural direct marketers: It helps new customers find them, and it enables them to better serve existing customers. Extension specialists may assist the local food grower in developing a website, creating compelling content, listing the farm in various relevant web directories, and engaging in social media. Another great market alternative is the food supply chain. Fritz and Schiefer (2008) noted that food moves through a supply process from farmers to food processors, distributors, wholesalers, retailers, and finally to final consumers. As Knight and Chopra (2013) indicated, Extension professionals should work closely with supply chain entities to assist growers in accessing markets.

## **Grower's Behavior During the Product Growing Phase**

When the optimal market has been identified, the grower adopts a production plan to meet specific consumer preferences (Thilmany & Sureshwaran, 2011). Timing of planting is one of the crucial decisions the grower must make. During the growing phase, the farmer monitors growth, cares for growing crops/animals, and does his or her best to mitigate negative effects that external forces might have on biological nature. The grower makes a decision regarding which production methods to adopt. He or she needs to determine the least costly combination of resources and inputs to maximize total production. It is necessary to tailor products to the specific buyers' expectations. As Maddy and Kealy (1998) noted, Extension specialists can assist the grower in targeting specific audiences.

## Grower's Behavior During the Harvesting and Selling Phase

At the harvesting and selling phase, the grower's choices should be guided by both product maturity and current market price resulting from forces of demand and supply. The ideal economically sound situation involves selling

when the market price is sufficient enough to make a profit. It is important to note that storing product may not be a viable option for the local food grower. Several studies have indicated that consumers interested in local food products seek freshness (Gumirakiza, 2013; Holloway & Kneafsey, 2000; Keeling-Bond, Thilmany-McFadden, & Bond, 2009; Lyon, Collie, Kvarnbrink, & Colquhoun, 2009; McGarry, Spittler, & Ahern, 2005; Onozaka & Thilmany-McFadden, 2011; Pollack, 2011; Zepeda & Leviten-Reid, 2004; Zepeda & Li, 2006). Storing may alter freshness, translating into undesirable produce. Consequently, the quantity supplied in the market depends heavily on the biological nature of the grower's produce/animals.

#### Conclusion

This perspective provides opinions on three phases of behaviors a single grower exhibits within a local food marketing system. The grower should make decisions that lead to long-run sustainability and maximum net farm income from operations. Extension specialists are expected to assist growers in adopting marketing strategies, customizing the marketing mix to each specific grower's circumstances. Future studies should explain factors influencing growers' choices among the various market alternatives.

#### References

Crowley, E. (2004). Market intelligence versus market research. Marketing Research Media, Article ID: 20041209.

Ernst, M., & Woods, T. (2014). *Roadside stands*. Retrieved from <a href="http://www.uky.edu/Ag/CCD/marketing/roadsidestands.pdf">http://www.uky.edu/Ag/CCD/marketing/roadsidestands.pdf</a>

Feldman, C., & Hamm, U. (2014). Consumers' perceptions and preferences for local food: A review. *Journal of Food Quality and Preference*, 40(2015), 152–164.

Fritz, M., & Schiefer, G. (2008). Food chain management for sustainable food system development. *Journal of Agribusiness*, *24*(4), 440–452.

Gumirakiza, J. D. (2013). Assessment of consumer motivations to attend farmers' markets, their preferences, and their willingness to pay for differentiated fresh produce: Three essays. Utah State University DigitalCommons@USU. All Graduate Theses and Dissertations.

Holloway, L., & Kneafsey, M. (2000). Reading the space of the farmers' market: A preliminary investigation from the UK. *Sociologia Ruralis*, 40(3), 285–299.

Keeling-Bond, J., Thilmany-McFadden, D., & Bond, C. (2009). What influences consumer choice of fresh produce purchase location? *Journal of Agricultural and Applied Economics*, *41*(1), 61–74.

Knight, A. J., & Chopra, H. M. (2013). Estimating local food capacity in publicly funded institutions. *Journal of Extension*, *51*(1) Article 1FEA9. Available at: <a href="http://www.joe.org/joe/2013february/a9.php">http://www.joe.org/joe/2013february/a9.php</a>

Lyon, P., Collie, V., Kvarnbrink, E., & Colquhoun, A. (2009). Shopping at the farmers' market: Consumers and their perspectives. *Journal of Food Service*, *20*(1), 21–30.

Maddy, D. J., & Kealy, L. J. M. (1998). Integrating a marketing mindset: Building Extension's future in the information marketplace. *Journal of Extension*, *36*(4) Article 4COM1. Available at: <a href="http://www.joe.org/joe/1998august/comm1.php">http://www.joe.org/joe/1998august/comm1.php</a>

McGarry W. M., Spittler, A., & Ahern, J. (2005). A profile of farmers' market consumers and the perceived advantages of produce sold at farmers' markets. *Journal of Food Distribution Research*, *36*(1), 192–201.

Onozaka, Y., & Thilmany-McFadden, D. (2011). Does local labeling complement or compete with other sustainable labels? A conjoint analysis of direct and joint values for fresh produce claims. *American Journal of Agricultural Economics*, *93*(3), 693–706.

Pesch, R. (2012). *Online strategies for direct farm marketers*. Retrieved from <a href="http://www.extension.umn.edu/co">http://www.extension.umn.edu/co</a> <a href="marketers">mmunity/retail/e-marketing/docs/online-strategies-direct-farm-marketers.pdf</a>

Pollack, S. (2011). Consumer demand for fresh produce: The U.S. example. *Changing Structure of Global Food Consumption and Trade*, *01*(1), 49–54.

Rhodes, V. J., Dauve, J. L., & Parcell, J. L. (2015). *The Agricultural Marketing System* (7th ed.). Columbia, MO: Mizzou Publishing.

Sharp, J., Imerman, E., & Peters, G. (2002). Community supported agriculture (CSA): Building community among farmers and non-farmers. *Journal of Extension*, *40*(3) Article 3FEA3. Available at: <a href="http://www.joe.org/joe/2002june/a3.php">http://www.joe.org/joe/2002june/a3.php</a>

Thilmany, D., Conner, D., Curtis, K., Liang, K., Mulik, K., O'Hara, J., . . . & Woods, T. (2013). Researching market and supply-chain opportunities for local foods systems: Setting priorities and identifying linkages. *Journal of Agriculture, Food Systems, and Community Development*, *3*(4), 131–137.

Thilmany, D., & Sureshwaran, D. (2011). Theme overview: Innovations to support beginning farmers and ranchers. *Choices: The Magazine of Food, Farm and Resource Issues*, *26*(2).

U.S. Department of Agriculture, Agricultural Marketing Service. (2015). Farmers markets and direct-to-consumer marketing. Retrieved from <a href="http://www.ams.usda.gov/services/local-regional/farmers-markets-and-direct-consumer-marketing">http://www.ams.usda.gov/services/local-regional/farmers-markets-and-direct-consumer-marketing</a>

Zepeda, L., & Leviten-Reid, C. (2004). Consumers' views on local food. *Journal of Food Distribution Research*, 35(3), 1–6.

Zepeda, L., & Li, J. (2006). Who buys local food? Journal of Food Distribution Research, 37(3), 5–15.

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